

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation pursuant to Senate Bill 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility located in the County of Los Angeles while still maintaining energy and electric reliability for the region.

Investigation 17-02-002

## ADMINISTRATIVE LAW JUDGE'S RULING ENTERING INTO THE RECORD ENERGY DIVISION'S ECONOMIC ANALYSIS REPORT, REQUESTING COMMENT

### **Summary**

Pursuant to the March 29, 2019 Assigned Commissioner's Phase 2 Scoping Memo and Ruling and the July 7, 2020 Administrative Law Judge's Ruling Updating Phase 2 Schedule, this ruling enters into the record the California Public Utilities Commission's Commission Energy Division Economic Analysis Report for comment by the parties.

Concurrent opening comments on the Economic Analysis Report must be filed and served by close of business November 16, 2020. Concurrent reply comments on the Economic Analysis Report must be filed and served by close of business November 23, 2020.

The production cost modeling and the hydraulic modeling report will be released this Fall with a schedule for comments and subsequent procedural steps.

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#### **Energy Division Economic Analysis Report**

Affixed to this ruling is Attachment A, the Energy Division Economic Analysis Report.<sup>1</sup> The Report was developed pursuant to the Scenarios Framework adopted on January 4, 2019.<sup>2</sup> The Report incorporated informal feedback received after two workshops in 2019. On June 20, 2019, Energy Division presented the results of Implied Market Heat Rate analysis.<sup>3</sup> On November 13, 2019, Energy Division presented the final econometric model results.<sup>4</sup> On February 6, 2020, Energy Division posted on its website a Further Explanation of Difference in Differences Results, affixed at Attachment B.<sup>5</sup>

The first study, referred to as the Volatility Analysis, estimates and assesses the source of volatility of natural gas prices at SoCal Citygate. Staff evaluated the frequency and volatility of gas price increases since the Aliso Canyon leak to quantify the level of the financial risk ratepayers could face due to gas price volatility. The volatility analysis finds that SoCal Citygate and SoCal Border prices became more volatile in 2017 and even more so in 2018. By 2018, increases of 25 percent in the same-day gas price became common. Additionally, the risk of potential losses for natural gas buyers from

<sup>2</sup> Assigned Commissioner and Administrative Law Judge's Ruling Adopting Scenarios Framework and Closing Phase 1 of Investigation 17-02-002, January 4, 2019.

<sup>&</sup>lt;sup>1</sup> See Attachment A.

<sup>&</sup>lt;sup>3</sup> Administrative Law Judge's Ruling Noticing June 20, 2019 Workshop, June 3, 2019, at Attachment A.

<sup>&</sup>lt;sup>4</sup> Administrative Law Judge's Ruling Noticing November 13, 2019 Workshop, October 25, 2019. November 13, 2019 workshop agenda available at <a href="https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\_Room/NewsUpdates/2019/Nov132019%20Workshop%20Agenda.pdf">https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\_Room/NewsUpdates/2019/Nov132019%20Workshop%20Agenda.pdf</a>.

<sup>&</sup>lt;sup>5</sup> The document is available at <a href="https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\_Room/NewsUpdates/2020/ExplanationOfDifferencesInDifferences.pdf">https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\_Room/NewsUpdates/2020/ExplanationOfDifferencesInDifferences.pdf</a>.

SoCal Citygate and SoCal Border hubs increased in 2017 and even more so in 2018.

The second study, referred to as the Difference in Differences (DID) study, estimates the economic impact of Aliso Canyon limitations on core customers by analyzing core customer billing data for Southern California Gas Company (SoCalGas) and Pacific Gas and Electric Company (PG&E) customers in zip codes where SoCalGas and PG&E service areas overlap. Staff found that after the Aliso Canyon incident, the average monthly gas procurement cost from 2016 through 2018 increased by \$1.82/bill. To separate the economic impact of Aliso Canyon limitations on core customers in each year after the Aliso Canyon incident, and to tease out the impact of pipeline outages that began in October 2017, the study estimated the impact in 2016, 2017 and 2018.

In 2016, the average gas procurement cost increased by \$1.32/bill compared to 2013 – 2015 (the time period before the Aliso Canyon incident). In 2017, the average gas procurement cost increased by \$1.89/bill compared to 2013-2015; this likely includes the full effect of the Aliso Canyon limitations and the partial effect of major transmission pipeline outages beginning on October 1, 2017. In 2018, the average gas procurement cost increased by \$2.25/bill compared to 2013-2015; this likely includes the full effect of the Aliso Canyon limitations and the full effect of the pipeline outages.

Lastly, the third study, referred to as the Implied Market Heat Rate (IMHR) and Excess Electricity Costs study, assesses California's electric market efficiency before and after the Aliso Canyon incident and estimates excess electricity costs caused by the Aliso Canyon limitation. This study found IMHR to be higher in NP15 compared with SP15, most notably after outages to Lines 4000 and 235-2 in October 2017. There were also significant increases in

IMHR inefficiency in NP15 compared to SP15 in 2018 even with the decrease of electric demand and overall generation in 2018. Staff concluded that increased IMHR in 2018 can be explained by the volatility and higher price of natural gas at SoCal Citygate, related to pipeline outages that occurred while there were still limitations on Aliso Canyon, and not one or the other conditions in isolation.

The IMHR and Excess Electricity Costs study also found that electricity costs in SP15 began to increase in October 2017, concurrent with the outage of Line 235-2. Staff estimated that electric customers paid about \$599 million in excess costs in 2018 due to pipeline outages and the Aliso Canyon restrictions. This estimate does not include other electricity costs such as administration costs or purchases of imported electricity, so it is likely an underestimate.

Parties are invited to formally file and serve on the record in this investigation concurrent opening comments on the Economic Analysis Report by close of business November 16, 2020. Concurrent reply comments must be filed and served by close of business November 23, 2020.

# Release of the Production Cost Modeling and Hydraulic Modeling Report

The Economic Analysis Report is the first part of the results of analysis by Energy Division according to the Scenarios Framework. The results from the production cost modeling and the hydraulic modeling will be issued shortly in a separate ruling. This upcoming separate ruling will also establish the procedure whereby the parties may make a motion to request Phase 2 hearings, evidentiary hearings, briefs, and/or public participation hearings. If no requests for additional process are received, the assigned Commissioner will issue a proposed decision adopting the results of the economic analysis, the production cost modeling, and the hydraulic modeling.

#### **IT IS RULED** that:

- 1. The Economic Analysis Report authored by the California Public Utilities Commission's Energy Division, is attached to this ruling as Attachment A.
- 2. The February 6, 2020 Further Explanation of Difference in Differences Results is attached to this ruling as Attachment B.
- 3. Parties may file and serve formal opening comments by close of business November 16, 2020.
- 4. Parties may file and serve formal reply comments by close of business November 23, 2020.

Dated November 2, 2020, at San Francisco, California.

/s/ ZHEN ZHANG
Zhen Zhang
Administrative Law Judge